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- (71) Applicant (for all designated States except US): **UNIVERSITY OF VIRGINIA PATENT FOUNDATION** [US/US]; 1224 West Main Street, Suite 1-110, Charlottesville, VA 22903 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **LANNIGAN-MACARA, Deborah, A.** [CA/US]; 1700 Jefferson

Park Avenue, Charlottesville, VA 22903 (US). **HENRICH, Lorin, M.** [US/US]; 417A Valley Road Extended, Charlottesville, VA 22908 (US). **SMITH, Jeffrey, A.** [US/US]; 815 Stillwater Lane, Earlysville, VA 22936 (US).

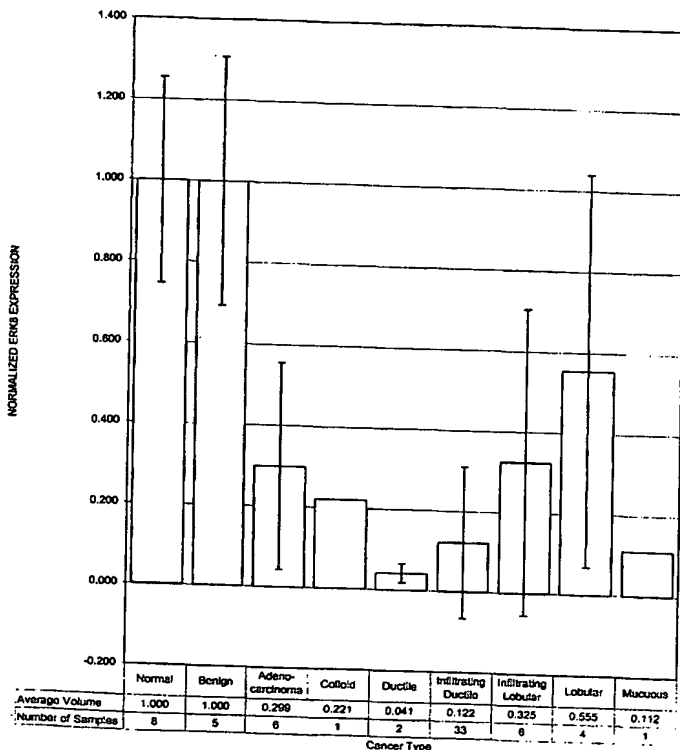
(74) Agent: **BREEN, John, P.**; University of Virginia Patent Foundation, 1224 West Main Street, Suite 1-110, Charlottesville, VA 22903 (US).

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(54) Title: **ERK7 AND ERK8, NOVEL DIAGNOSTIC MARKERS FOR CANCER**

Erk8 Expression In Different Breast Cancers



(57) Abstract: The present invention is directed in part to the discovery of a novel signal transduction pathway that regulates estrogen responsiveness. Human extracellular signal-regulated kinase 8 (ERK8) has been discovered by applicants to preferentially enhance the destruction of ER $\alpha$ , and loss of ERK8 is correlated with breast cancer progression. Thus monitoring the expression of ERK8 can be used as a diagnostic and therapeutic indicator of cancer and cancer progression.

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